BEA920010018US1

Abstract of the Disclosure

Method for Supporting User Level Online Diagnostics on Linux

A module is provided to support online cache diagnostics in a Linux operating system. The module is dynamically loaded to a kernel of the operating system. Upon activation, the module allocates memory for a user level program and a manager maps a contiguous buffer of memory from a kernel address space to a user process address space. The buffer is contiguous in both the physical and virtual address space. Physical memory displacement between access is controlled from the user level. Accordingly, the module enables allocation of contiguous lines of memory from the kernel to the user space in which control of the memory displacement occurs at the user level.